

DEPARTMENT OF NATURAL RESOURCES
Groundwater Quality Division
Grand Rapids - Compliance Office

Staff Summary

May 23, 1985

US EPA RECORDS CENTER REGION 5



502542

Kent County DPW North Kent Landfill, Plainfield Township, Kent County:

Groundwater contamination was first detected at the North Kent Landfill in late 1982, with the presence of volatile chlorinated organic solvents in monitoring wells and the groundwater underdrainage system. Subsequent quarterly sampling during 1983, 1984, and 1985 continue to show groundwater contamination beneath and around the site. This is supported by the fact that the monitoring wells have shown a general increase in the number of organic contaminants in many of the wells as well as an increase in the number of wells contaminated. Likewise, many of the inorganic compounds (e.g. chlorides, chemical oxygen demand, pH, iron, and sulfates) sampled over the last two years indicate a degradation of the groundwater quality in test wells around the landfill.

Department staff have determined that Section 6(a) of the Water Resources Commission Act 245, P.A. of 1929, as amended, has been violated based upon groundwater samples collected. Section 6(a) prohibits any discharge to the waters of the state, "any substances which are or may become injurious to the public health, safety or welfare; or which is or may become injurious to domestic, commercial, industrial, agricultural, recreational, or other uses which are being or which may be made of such water;...".

Department staff have further determined that all surface water discharges from the facility are contaminated by organic compounds originating from the landfill. The organic contaminants have been detected by both the Department and the County at outfalls 004, 005, and 006. The organic contaminants have increased in numbers and concentrations at outfall 005, indicating that the level of contamination is not decreasing. The presence of these compounds in the outfalls constitutes violations of NPDES Permit No. MI 000037486 and Act 245, P.A. 1929, Sections 6(a) and 7(1).

Department staff has also investigated odor complaints emanating from areas of the site, especially the leachate collection pond, the open manholes of the leachate collection system, and the active waste deposition area. Department staff has determined that odors emanating from these areas constitutes a violation of R 366.1901 of the rules promulgated pursuant to Act 348, P.A. of 1965, as amended, the Michigan Air Pollution Act. The County had tested foam as an odor control measure for the leachate ponds in late 1984. No specific recommendations resulted from the tests. Further, the County failed to make any modifications to the ponds this winter and was thus unprepared to control odors this spring. No permanent solutions for the pond odors have been promoted. Landfill gases have been studied, but control of that odor source will not be fully implemented for some time. Certain practices (rollback) used by the County promote rather than control odors from the waste deposition areas.

Lastly, Department staff have further determined that because of the facts constituting the above violations, further operation of the North Kent Landfill is a violation of Act 127, P.A. of 1970, the Michigan Environmental Protection Act which prohibits conduct which has, or is likely to pollute, impair or destroy the air, water, and other natural resources or the public trust therein.

It is the Department's position that the County has been repeatedly advised of the violations cited in the notice for this hearing and that the County's response has been too little too late. [REDACTED]

[REDACTED]